



BACKGROUND OF INVENTION

I. Field of the invention

This invention relates to a new design of pots, "Legged Pots", for plants, flowers, or vegetable growth to reduce products cost and environmental contamination by fertilizer and pesticide. The legged pot is a valuable pot to save labor and material cost, to reduce water and fertilizer loss, and soil use. It is very useful in greenhouses, nursery fields, residential, and commercial places.

II. Description of prior pots and watering system

Traditional pots have no legs, only few holes on the bottom for draining excess water to avoid plant damage. But, the plant must be watered frequently. If tray is used to hold water, the plant can be easily damaged. In greenhouses or nursery fields, the pots are sited on the ground or on the table with no flat. As a result, fertilizer and/or pesticide drain out with the water from the pot into the ground causing environmental contamination.

In greenhouse and nursery field, watering cost is very high. Scientists use trickle irrigation system to reduce the watering cost. The system worked well to solve this



problem. However, the cost for setting up the system (both labor and material costs) is still high, and workers have to frequently check each dropper to insure it is working properly. Sometimes the water bill increases, which means more water is wasted by using this method. The problem of soil and ground water contamination by fertilizer and pesticide is still not solved. Not many producers like to use the trickle irrigation system.

Scientists also use the wick method to reduce the frequency of watering needed for small pots. The problem of over-watering is solved using this method. However, the pot's cost doubles because a support pot has to be used, and the wick has to be inserted by hand. The limitation of this method is that the wick can be used only in small pots.

Some producers use hydroponics to produce their products. This method includes sand culture, and requires a concrete construction. The cost is very high, the plants are easily damaged by water, and disease spread is very likely.

III. Summary of Invention

“Legged Pot” means there are legs under the pots(see fig. 1). The legs are filled with soil. It is so that water can be absorbed by the soil from a plastic film or tray. This way the plant will not be damaged by water, water will never be lost, and hand watering is now unnecessary in greenhouses and nursery fields.

IV. Detailed Description of the Invention

The Legged Pot, my invention, has more advantages than regular pots with the trickle irrigation system and wick method. Legged Pots with plastic film flat in greenhouses and nursery fields or with a tray in residential or commercial places are the best design for plant growth. All the problems of traditional pots with the trickle irrigation and wick method are solved when using this design of pots. No water is lost, no fertilizer or pesticide goes into the ground, and the water will never damage the plants. Material cost is very low. Less soil is used because the soil environment in the pot is improved. Almost no watering cost. Only thing needed for watering plants is just turning on the faucet in greenhouses and nursery fields. Possibility of disease spread is dramatically decreased. Watering plants once a month in residential and commerce place.

Legged pots used in greenhouses and nursery field with plastic film underneath (see Fig-4) can be watered only once a week or once another week. The sides of film are held up by wooden rods, steel wire, or even by soil to make a tray to hold water. The depth of the trays is about 3-5 inches and there is no limit on the length. A faucet can be placed on one end or midway for water irrigation.

The legs can also be applied to regular trays. It looks like a "Legged Box" (see fig. 5). Their size can be varied. The depth ranges from 4 to 7 inches. The number and length of the legs depends on the size of the box. Its functions like a flower or vegetable bed. The flat of plastic film used are the same as described in above paragraph.